



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029



SDMS DocID

2095172

SUBJECT: Recommendation for Determination of
Imminent and Substantial Endangerment
at the Bally Ground Water Contamination Superfund Site

DATE: March 30, 2007

FROM: Mitch Cron, RPM
Western PA/MD Remedial Branch

TO: James Burke, Director
Hazardous Site Cleanup Division

Because of the factors outlined below, I have determined that a threat to the public health or welfare or the environment exists at the Bally Ground Water Contamination Superfund Site ("Site") and I recommend that a finding be made that there may be an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of a hazardous substance at or from the Site.

1. **Site Name and Location:** Bally Ground Water Contamination Superfund Site, Bally Brook Industrial Park, 20 North Front Street, Bally, Berks County, PA
2. **Owner:** GBI Bally Brook; **Former Owner/Operator:** Bally Engineered Structures, Inc. (BES, a PRP for the Site)
3. **Population Information/Area Description:**

This document pertains to two tenant spaces within the former BES manufacturing facility, which is now identified as the Bally Brook Industrial Park. The former BES manufacturing facility has been subdivided by GBI Bally Brook (the current owner) into tenant spaces that are leased to small businesses. The tenant spaces that this document pertains to are identified as Impress Industries, which utilizes its tenant space for shipping/warehousing activities, and Luciana and Son, which utilizes its tenant space for fabrication of tubs, sinks, and counter tops. As such, two workers are routinely present in Impress Industries, and approximately five to ten workers are routinely present in Luciana and Son.

Other tenant spaces within the Bally Brook Industrial Park include office space, a gym, light manufacturing space, carpentry shops, and warehousing space. The area in the vicinity of the Bally Brook Industrial Park includes a church, residential housing, athletic fields and open space, and local government facilities.

4. **Access:** X restricted unrestricted



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5. **Coordination with Other Authorities:**

X State Contact: Mr. Asuquo Effiong, Pennsylvania Department of Environmental Protection (PADEP)
____ Local Contact: _____
X Other Contact: Agency for Toxic Substances and Disease Registry (ATSDR)

6. **Site Characteristics:**

The Bally Ground Water Contamination Superfund Site was listed as final on the National Priorities List (NPL) on July 22, 1987. The Site was listed on the NPL because a release occurred at the former BES facility, which resulted in the contamination of one of the Borough of Bally's municipal wells by hazardous substances (including trichloroethylene (TCE), and 1,1,1-trichloroethane). The BES facility manufactured refrigerated cases, and other products, between the 1930s and approximately 1995. EPA issued a Record of Decision (ROD) to address the contamination of the municipal well in June 1989. An Explanation of Significant Difference (ESD), pertaining to air-stripper emission controls and the potential need for additional extraction wells at the Site, was issued on January 18, 1990. Additional response actions to address contamination of the municipal well by a previously unidentified hazardous substance (1,4-dioxane) are imminent.

In approximately 1988, the former BES facility was sold to GBI Bally Brook. GBI Bally Brook subdivided the former manufacturing facility (consisting of two manufacturing buildings, and an office building) into tenant spaces, which are currently leased to small businesses. The former BES facility is now known as the Bally Brook Industrial Park. The small businesses currently located at the Bally Brook Industrial Park include warehousing, light manufacturing, carpentry, office space, and a gym.

In 2004 and 2005, Sunbeam Products, Inc. (Sunbeam), under EPA oversight, collected subslab soil vapor samples from various tenant spaces within the Bally Brook Industrial Park. The subslab soil vapor samples were collected directly from beneath the concrete slab of the Bally Brook Industrial Park, in accordance with appropriate sampling methodology. The subslab sampling results revealed concentrations of Site-related contaminants (including 1,1-dichloroethene, cis-1,2-dichloroethene, TCE, 1,1,1-trichloroethane, and 1,1-dichloroethane) in vapor form beneath the tenant spaces.

In 2006, Sunbeam, under EPA oversight collected additional subslab soil vapor samples, and indoor air samples, to characterize vapor intrusion at the Bally Brook Industrial Park. The 2006 subslab sampling results revealed the presence of Site-related contaminants. The indoor air sample results revealed that, for the majority of the tenant spaces sampled, the Site-related contaminants present in vapor form in indoor air do not pose unacceptable cancer/non-cancer risks for workers. However, in two tenant spaces (Impress Industries and Luciana and Son), indoor air concentration of Site-related contaminants are present at levels of concern to workers for cancer and non-cancer risk.

7. Hazardous Substance(s) Present:

Impress Industries

Site-related contaminants are present in vapor form in the Impress Industries tenant space at levels of concern for cancer and non-cancer risks. The following Site-related contaminants present in Impress Industries are hazardous substances: 1,1-dichloroethene, TCE, and 1,1,1-trichloroethane. However, the cancer/non-cancer risk posed to workers present within the Impress Industries tenant space are driven by one hazardous substance, TCE. The highest subsurface soil vapor concentration of TCE identified at the Bally Brook Industrial Park was present beneath the Impress Industries tenant space: 210,000 micrograms per cubic meter. In addition, the highest indoor air concentration of TCE measured at the Bally Brook Industrial Park has been identified in the Impress Industries tenant space: 490 micrograms per cubic meter.

Luciana and Son

Site-related contaminants are present in vapor form in the Luciana and Son tenant space at levels of potential concern for cancer risks. The following Site-related contaminants present in the Luciana and Son tenant space are hazardous substances: 1,1-dichloroethene, TCE, and 1,1,1-trichloroethane. The risk posed to the workers present within the Luciana and Son tenant space is also driven by TCE. The highest subsurface soil vapor concentration of TCE identified beneath the Luciana and Son tenant space was 3,000 micrograms per cubic meter. The highest indoor air concentration of TCE identified in the Luciana and Son tenant space was 48 micrograms per cubic meter.

8. Threat to Public Health or Welfare or the Environment: (References are to Section 300.415 of the NCP)

— 300.415(b)(2)(i) Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain.

As mentioned above, indoor air sampling at the Bally Brook Industrial Park has identified Site-related contaminants in vapor form at concentrations of concern in two tenant spaces: Impress Industries and Luciana and Son.

The indoor air sampling results were reviewed by ATSDR, and the EPA Region III Toxicologist assigned to the Site.

The EPA Region III Toxicologist performed a risk evaluation for the indoor air sampling results, based on standard commercial/industrial risk assessment parameters, as follows:

Impress Industries

The risk evaluation indicated that for the Impress Industries tenant space, the hazard index (representative of non-cancer effects) would be three (based on arithmetic mean concentrations), or 6.5 (based on maximum concentrations). A hazard index greater than one is considered to represent an unacceptable non-cancer risk. The cancer risk for the Impress Industries indoor air data was between two in 10,000 and 4 in 1,000 lifetime excess cancer risk (commonly written as "2E-4 to 4E-3"), based on average contaminant concentrations; or 4E-4 to 9E-3 based on maximum contaminant concentrations. The range in cancer risk reflects the range in possible cancer slope factors. In all cases, the cancer risk in Impress Industries exceeded the acceptable cancer risk range (1E-4 to 1E-6) included in Section 400.430 (e) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Based on this evaluation, the indoor air concentration of Site-related contaminants represents unacceptable cancer and non-cancer risks for Impress Industries workers.

Luciana and Son

The risk evaluation indicated that for the Luciana and Son tenant space, the hazard index would be 0.6, and the cancer risk would range from 4E-5 to 9E-4. The range in cancer risk reflects the range in possible cancer slope factors. At the upper end of the range of cancer slope factor toxicity, the cancer risk in Luciana and Son exceeded the acceptable cancer risk range included in the NCP. Based on this evaluation, the indoor air concentration of Site-related contaminants represent potentially unacceptable cancer risks for Luciana and Son workers.

Review of an ATSDR fact sheet for TCE (dated July 2003) reveals that breathing small amounts of TCE may cause headaches, lung irritation, dizziness, poor coordination, and difficulty concentrating. Breathing large amounts of TCE may cause impaired heart function, unconsciousness, and death. Breathing TCE for long periods of time may cause nerve, kidney, and liver damage. In its 9th report on Carcinogens, the National Toxicology Program determined that TCE is "reasonably anticipated to be a human carcinogen." The International Agency for Research on Cancer has determined that TCE is "probably carcinogenic to humans."

— 300.415(b)(2)(vii) The availability of other appropriate Federal or State response mechanisms to respond to the release.

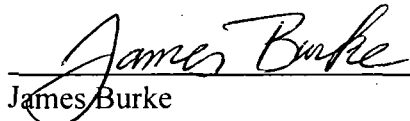
The Site is already the subject of a PRP-lead Superfund remedial action. EPA is the lead agency for the Site, and the PADEP is the support agency for the Site.

9. **List of Supporting Documents:**

- Facility Vapor Intrusion Evaluation, dated December 2006, prepared by Arcadis G&M, Inc.
- EPA Memo - Review of Facility Vapor Intrusion Evaluation Summary, dated February 1, 2007, prepared by EPA Region III Toxicologist.
- ATSDR TCE Fact Sheet, dated July 2003, prepared by ATSDR.

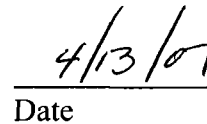
Action by the Approving Official:

I have reviewed the above-stated facts and based upon those facts and the information compiled in the documents described above, I hereby determine that the release or threatened release of hazardous substances at and/or from the Site presents or may present an imminent and substantial endangerment to the public health or welfare or to the environment.


James Burke

Director

Hazardous Site Cleanup Division


Date